

EVENNESS TESTER FOR SPUN YARNS, ROVINGS AND SLIVERS

# EVENEXT



# EVENEXT Code 2343

## Evenness and hairiness tester

### Description

EVENEXT is the next generation of Mesdan evenness tester, designed to measure with high accuracy the mass evenness, imperfections and hairiness of all types of natural, artificial and synthetic spun yarns.

Without the need of another external sensor, it is also suitable to test rovings and slivers, for the analysis of the mass variations in the whole spinning process, as well as to identify the exact origin of the faults thanks to the spectrogram.

It is equipped with high quality capacitive ceramic electrodes to guarantee the maximum reproducibility, repeatability, and consistency in the readings; designed with the latest mechanical and electronic components available on the market, and with completely new, user-friendly software.



### Technical Features

- 3 slots for yarns (for the different count ranges) and 1 for slivers and rovings
- Modular system: the basic configuration can be upgraded with the addition of the hairiness sensor (Determination of Hairiness "H" and standard deviation of Hairiness "sH") and finally with the automatic feeding system
- Equipped with stand for roving and slivers
- Automatic calibration before testing
- New Windows software with statistics, graphs and data storage
- Numerical and graphical results compatible with the most popular world standards
- Engineered, designed and manufactured in Italy

## Modular system

### H-sensor, code 2343.10 (optional).

Hairiness sensor to analyse yarn hairiness.

Determination of Hairiness (H) and standard deviation of Hairiness (sH).

Statistical and graphical elaboration of hairiness testing.

H value diagram representation.

### Automatic feeding system - 24 positions - code 2343.900 (optional - the H-sensor is mandatory).

### Moveable yarn creel - 24 positions - code 2341.200 (optional).

24-position creel fitting wheels, easy to move.

Suitable for cones and cops.

Equipped with accurate yarn pretensioners.



Evenness



Evenness + Hairiness



Evenness + Hairiness + Auto



Yarn creel

## Results of each individual test

- CV% and U% of mass variation;
- AVE relative yarn count: IPI with 4 channels for neps, thick places, thin places; CV (L)% with 7 reference lengths.

## Graphic data of each individual test

- Diagram and spectrogram of mass variations, diagram of hairiness.

## Statistics and other results:

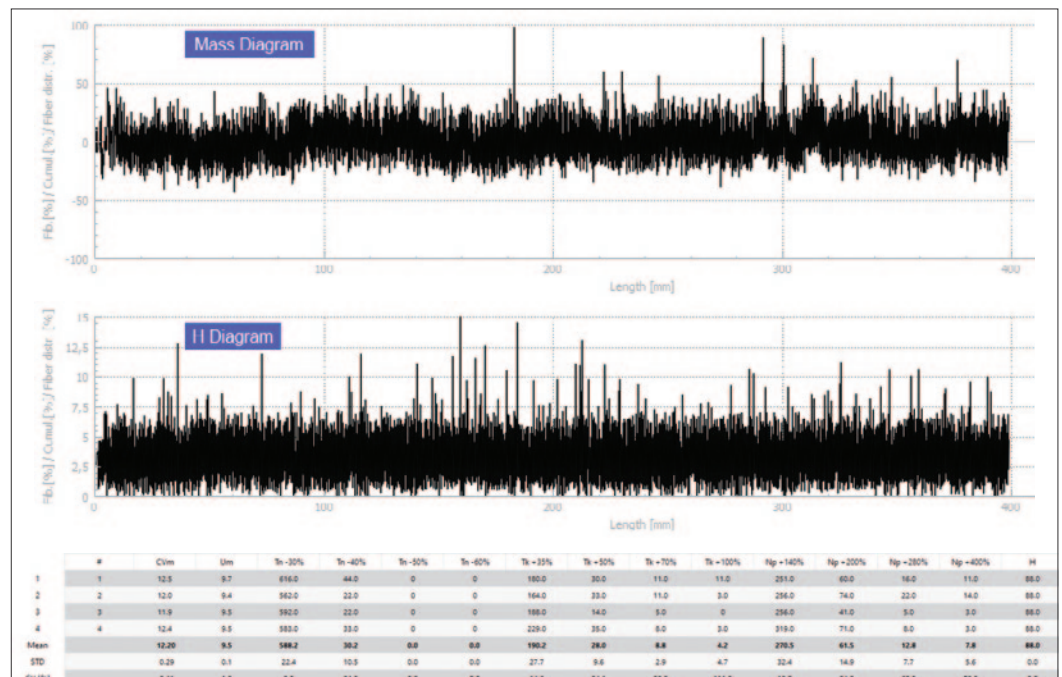
- Mean, range, standard deviation (s);
- 95% confidence limits (Q95%);
- IPI per 1000m (1 km) of yarn length; overall spectrogram;
- Data and graphics saved in SQLite database.

## Measuring Specifications

- Range of material: from Ne 120 (yarn) to 12 or 30 ktex (g/m), with standard or large sensor slot (sliver)

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## SINGLE TEST



# EVENEXT

- Testing speed: 8 - 25 - 50 (for slivers), 50 - 100 (for rovings), 200 - 400 - 800 (for yarns) m/min
- Dynamic measuring range:  $\pm 12,5\%$ ,  $\pm 25\%$ ,  $\pm 50\%$ ,  $\pm 100\%$
- Measuring mode: inert or half-inert mode
- 7 evaluating times: from 30" to 20' (30", 60", 75", 2'30", 5', 10', 20')
- Significant CV% and U%: 0,20% to 99,99%

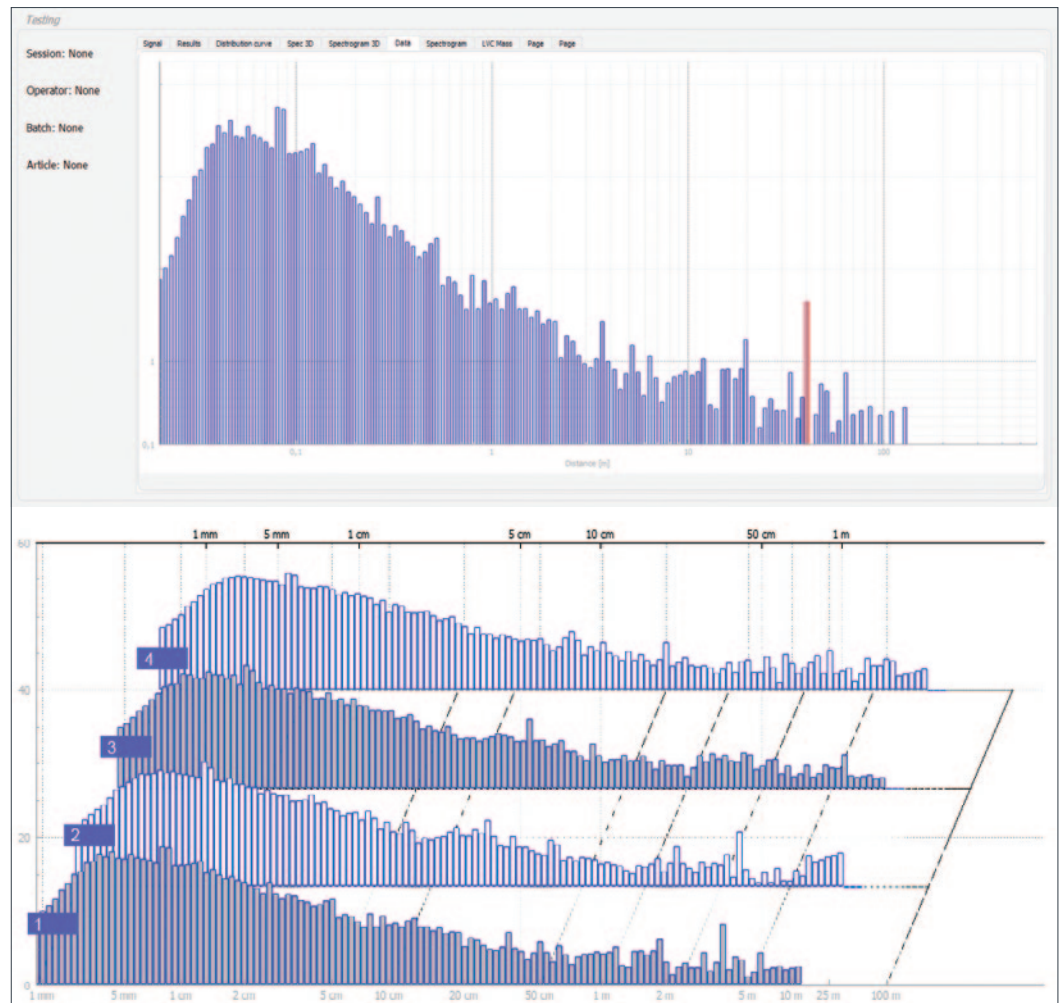
## Spectrogram

- max. 165 channels
- minimum wave lengths
- 2 cm at 400 and 800 m/min
- 1 cm at 200 m/min
- 0.5 cm at 100 m/min
- 0.3 cm at velocity lower than 100 m/min

## IPI (imperfections)

- 4 channels
- Thin places (-30%, -40%, -50%, -60%)
- Thick places (+35%, +50%, +70%, +100%)
- Neps: +140%, +200%, +280%, +400%

## GROUP OF TESTS



## COMPONENTS

- **Evenness tester**, code 2343, measuring frame with capacitive sensor suitable for yarn, roving and sliver.
- **Monitor with integrated Personal Computer** with Windows O.S. and software in various languages.
- **Roving and sliver feeding frames** (included with the basic configuration)

## DIMENSIONS / POWER SUPPLY

Weight: 60 kg (without automatism)  
 Dimensions: (L) 490 x (W) 320 x (H) 830 mm (without automatism)  
 Power supply: 115 up to 230 Vac, 50/60 Hz, single-phase  
 Air supply: 6 bar

## OPTIONAL

Hairiness sensor for yarns	code 2343.10
Automatic feeding system, (H-sensor mandatory)	code 2343.900
Creel trolley 24 positions	code 2341.200
Support table with waste drawer	code 2343.860
Monitor with integrated PC	code 2343.874
Monitor desk support	code 2343.875
UPS device	code 2341.900

Photographs and descriptions of the present leaflet have to be considered as purely indicative and not binding